

**WATER RESOURCES BOARD
INTER-OFFICE MEMO**

To: Kathleen Crawley, Acting General Manager
From: Beverly O'Keefe, Supervising Planner
Date: April 25, 2005
Subject: Drought Update: Current Conditions

BACKGROUND

Pursuant to State Guide Plan Element 724: The Rhode Island Drought Management Plan, the Water Resources Board is required to assess water conditions monthly. The NOAA National Weather Service reports precipitation through March was above normal (see Attachment A). The **USGS Water Conditions Statement** reports groundwater conditions throughout southeastern Rhode Island ending March was generally **above normal**. Water levels in the rest of Rhode Island were generally normal (see map, Attachment B). The U.S. Geological Survey January 2005 Water Conditions Statements marked one new high ground water level in Rhode Island (Portsmouth 551). There were no new low ground water levels identified in Rhode Island (Attachment B). Surface water flows at the end of March 2005 were generally normal for Rhode Island. During the week of March 28, heavy precipitation ranging from 2 to 4 inches across Rhode Island, increased stream flows significantly and continuing into early April. The Scituate Reservoir on April 22, 2005 was measured at 284.68 FEET (102.1 % of capacity). The NOAA Drought Severity Index value for Rhode Island, period ending 16 Apr 2005, shows an unusual moist spell.

DISCUSSION

Water conditions for Rhode Island are generally above normal during the month of March. Staff will continue to provide information updates to the Drought Steering Committee.

RECOMMENDATIONS : Information only.

ATTACHMENT A: NOAA NWS RI Climate Report (see page 2, and <http://www.erh.noaa.gov/box/fcsts/BOSCLIPVD.html>)

ATTACHMENT B: USGS March 2005 Water Conditions Statement
http://ma.water.usgs.gov/water_const/water_conditions_200503.htm
http://ma.water.usgs.gov/current_cond/cwrc_gw.htm

ATTACHMENT C: NOAA NCEP Palmer Drought Severity Index
http://www.epc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif

Rhode Island Precipitation
National Weather Service Taunton, MA
Preliminary Precipitation Data
Past 12 months ending March 2005

RI 1 month March 2005	Rainfall	Departure	Percent	Normal
KENT	4.90	0.62	114	4.44
BRISTOL	4.86	0.58	114	4.44
NEWPORT	4.86	0.58	114	4.44
PROVIDENCE	4.39	-0.13	97	4.48
WASHINGTON	4.27	0.03	101	4.4

RI 2 month Feb-Mar 05	Rainfall	Departure	Percent	Normal
KENT	9.04	0.32	104	8.72
BRISTOL	9.08	0.36	104	8.72
NEWPORT	9.08	0.36	104	8.72
PROVIDENCE	9.51	0.51	106	9.00
WASHINGTON	7.97	-0.67	92	8.64

RI 3 month Jan-Mar 05	Rainfall	Departure	Percent	Normal
KENT	11.17	-1.35	89	12.52
BRISTOL	12.07	-0.45	96	12.52
NEWPORT	12.07	-0.45	96	12.52
PROVIDENCE	11.30	-1.54	88	12.84
WASHINGTON	10.11	-2.29	82	12.40

RI 6 month Oct 04-Mar 05	Rainfall	Departure	Percent	Normal
KENT	27.55	4.26	118	23.29
BRISTOL	28.46	5.64	125	22.82
NEWPORT	28.46	5.64	125	22.82
PROVIDENCE	27.97	3.00	112	24.97
WASHINGTON	25.06	2.31	110	22.75

RI 12 month Apr 04-Mar 05	Rainfall	Departure	Percent	Normal
KENT	44.66	-1.23	97	45.89
BRISTOL	45.00	-0.42	99	45.42
NEWPORT	45.00	-0.42	99	45.42
PROVIDENCE	46.85	-0.86	98	47.71
WASHINGTON	42.68	-2.27	95	44.95

December to date at T. F. Green State Airport: Through 1 am 4/6/2005				
Rainfall	Departure	Percent	Normal	
2.02	+1.27	269	0.75	